Check for already used Customer Ref. Number

Summary	
Module	B1 Validation System / Universal function
Level	Advanced
Requirements	B1UP 2.7.3.0 or higher

Scenario

The customer have a business rule that when entering customer reference numbers on sales orders it should not be possible to enter a Reference number that the selected customer have already used.

Needed Configuration

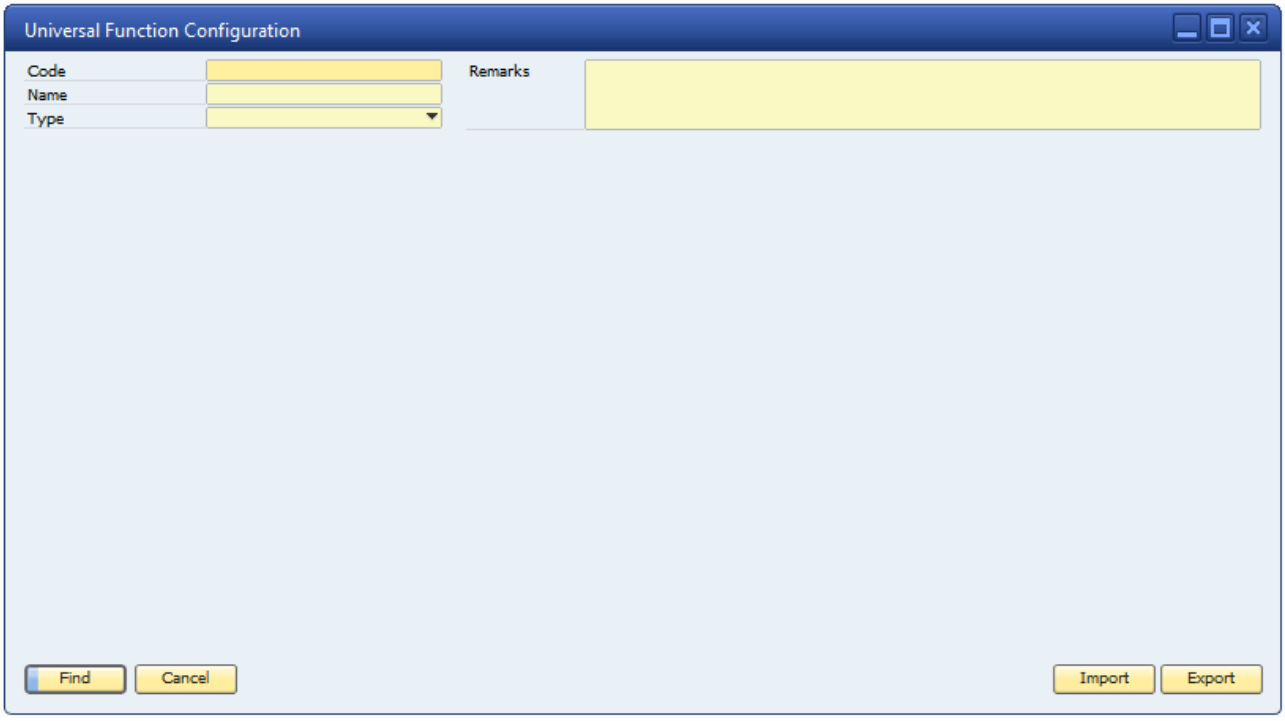
We need the following configurations

1. A Universal Function of type Message what holds the error-message to the user
2. A B1 Validation System to do the check when the user are trying to leave the customer ref. no. field

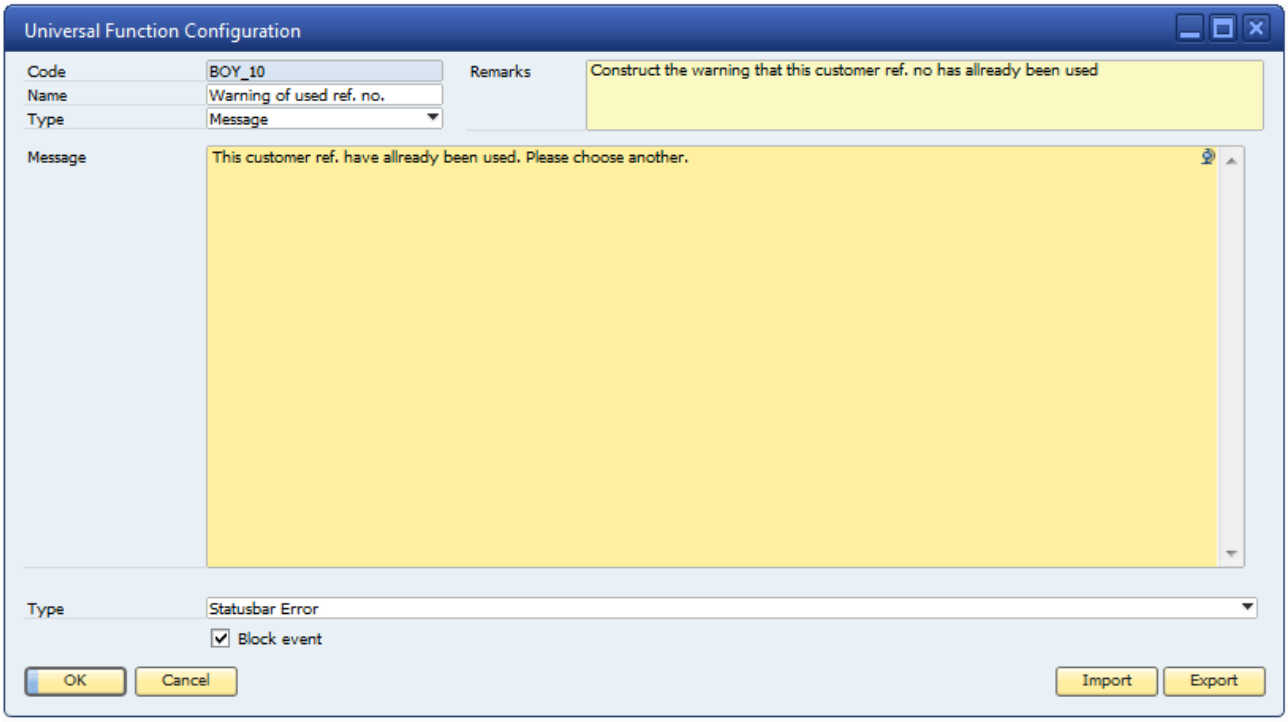
Step 1: Universal function – Message

The first thing we need is to create the message that we should show the user if we find the entered customer reference number invalid. This is done using a universal function.

To create universal functions please navigate to Administration > Add-Ons > B1 Usability Package > Module configuration >Universal Function configuration



Start by switching to add-mode and choose the Universal Function type called Message and enter the message.



In the message type we choose the “Statusbar Error” since we would like to show the error as a red bar in the lower left corner and we choose Block Event since we will not allow leaving the Customer ref. field before a valid reference number is entered.

In the sample we give the configuration the code BOY_10 and save the configuration.

Step 2. B1 Validation System

We now have your message that we will show so now we need to create a B1 Validation system Configuration to trigger the message on the correct user activity (leaving the customer ref field) and with the correct condition (that the entered value have not been used before).

To create a new B1 Validation Configuration please navigate to Administration > Add-Ons > B1 Usability Package > Module Configurations > B1 Validation Configuration

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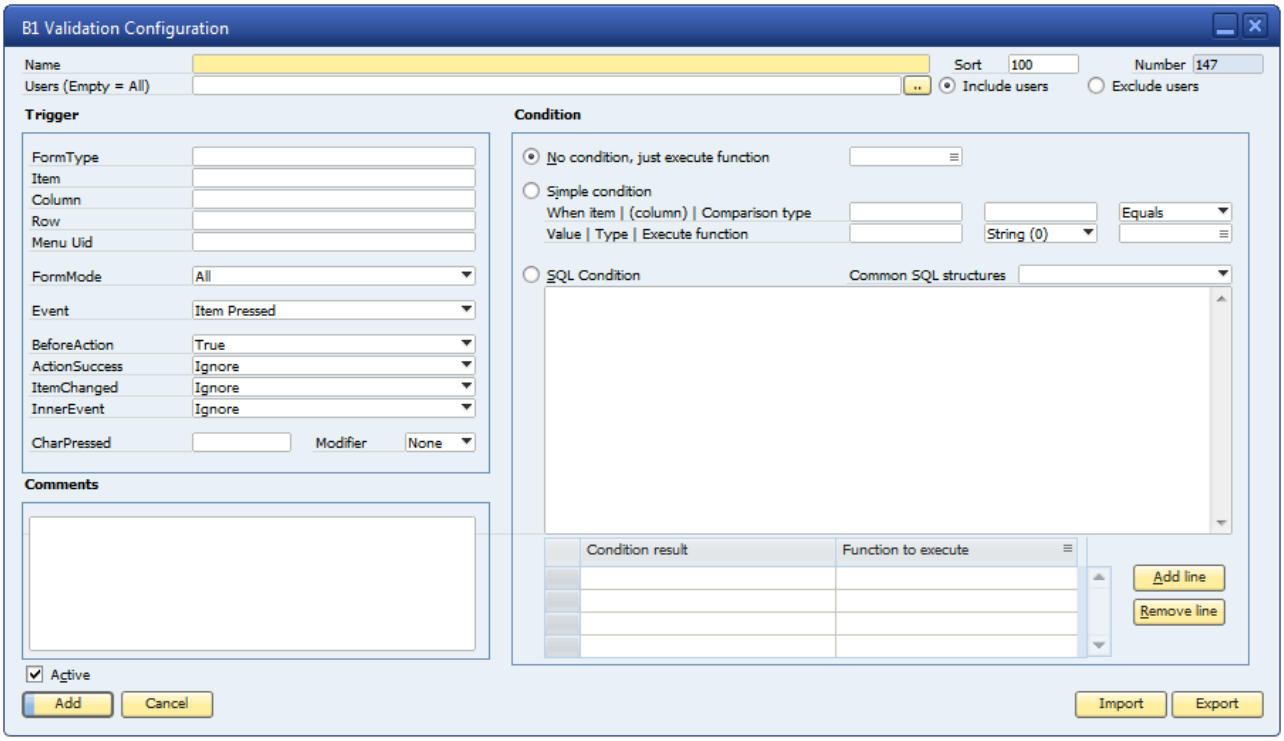
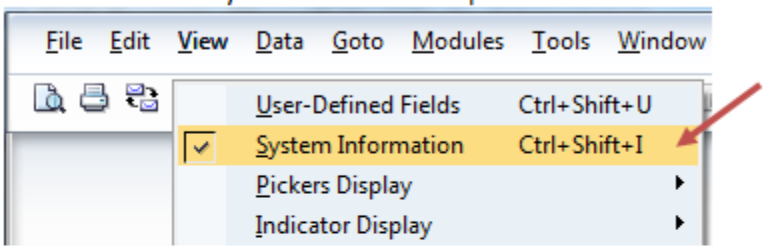


NB: IF YOU DON'T HAVE THIS OPTION YOU WILL NEED TO ACTIVATE B1 VALIDATION SYSTEM IN THE MAIN CONFIGURATION (ADMINISTRATION > ADD-ONS > B1 USABILITY PACKAGE > B1 USABILITY CONFIG)

First thing we need to do is find the formtype of the Sales Order and the itemUID of the Customer Ref. No field

How to find formtype of a window:

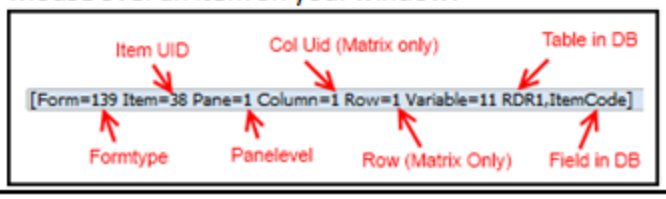
1. First activate the system information option I SAP Business One (View > System information).



This is needed to display the formtype.

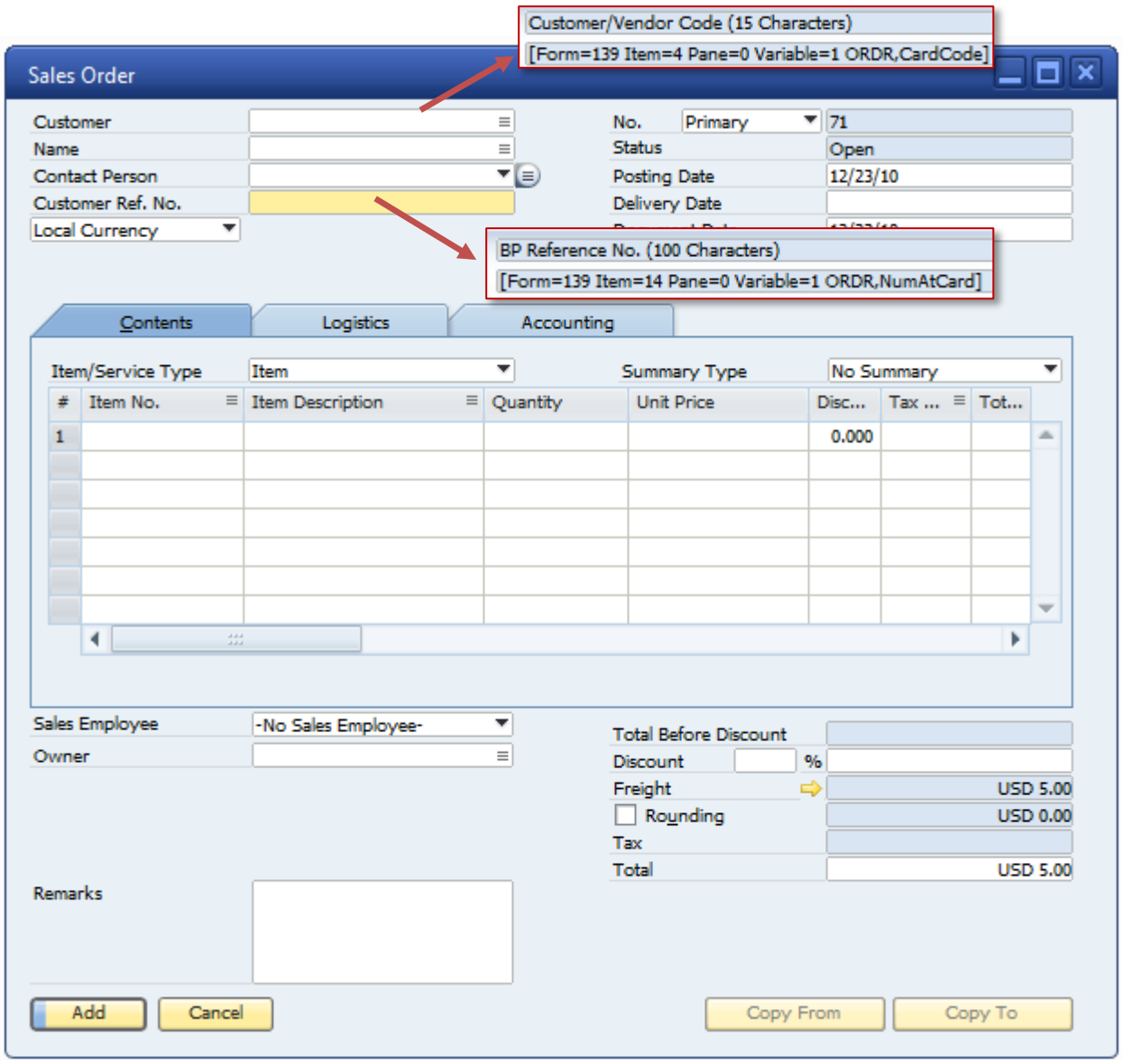
2. Next open the window you need form type for.

3. After this is activated the information is displayed in the bottom left corner of the client, when you hold the Mouse over an item on your window.



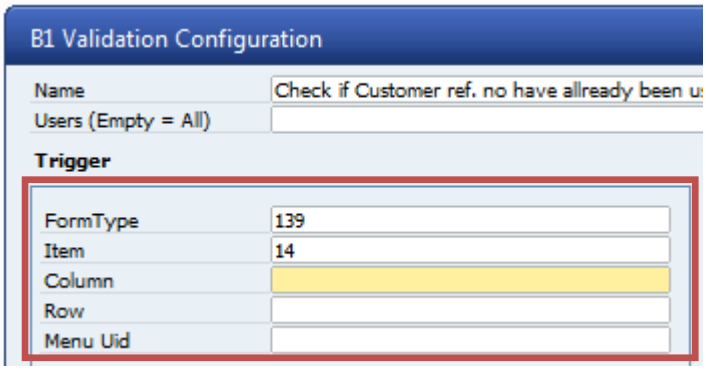
Common formtypes

- 134 = Businesspartners
- 150 = Items
- 60100 = Employee
- 392 = Journal Entry
- 133 = A/R Invoice
- 141 = A/P Invoice
- 320 = Sales Oppertunity
- 651 = Activity



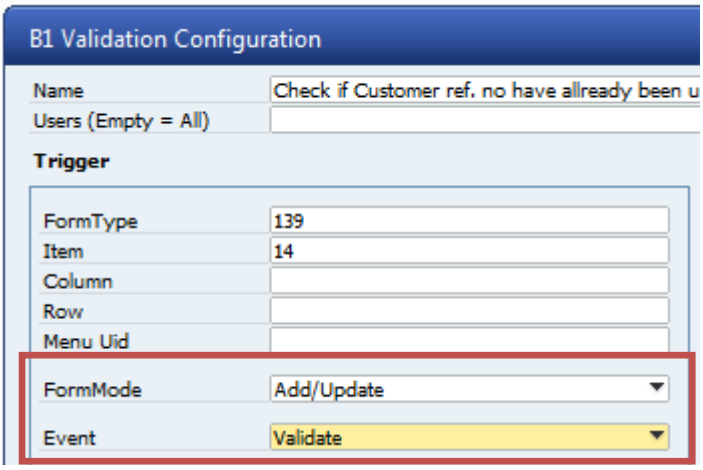
By holding the mouse over the customer ref. No we find that the formtype is **139** and the item is **14.** We also need the customer code which is item **4.**

We use this in the B1 Validation configuration and add you name of the configuration as well.



Since we are not working on line level we do not enter a specific column or row

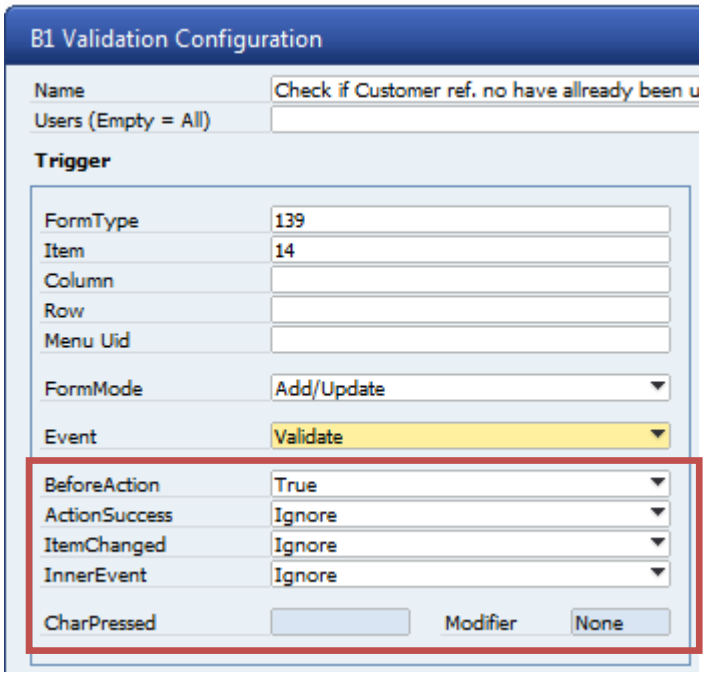
Now we have told the system what window we are working on (139) and what item is involved (14). Next thing we need to tell which modes (find/add/ok/update) of the window this should work on and what should happen to item 14 that should trigger the message (leaving the item).



Here we set that a message should only happen if we are about to add or update the sales order (it does not make any sense to do the check in OK-mode of Find-mode).

For the event we choose Validate since this event happens just before leaving an item.

Our trigger is almost complete now. All we need to do is to consider the advanced trigger conditions.



In this case we actually don't need to change anything.

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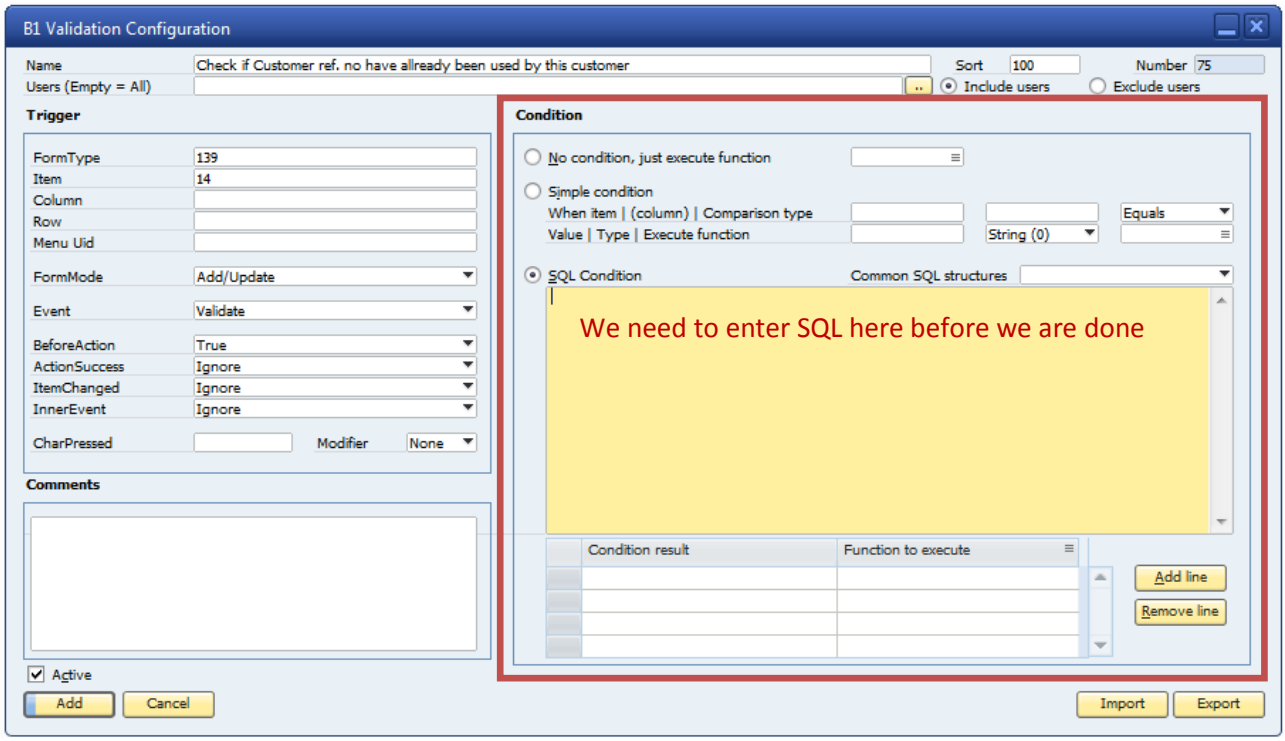
- BeforeAction should be **True** since we are doing you check before SAP leaves the item
- We are doing it BeforeAction = True so we should **ignore** Action Success
- We will do the check no matter if our value in the item have changed or not so we leave ItemChange to **Ignore**
- We are not dealing with complex event that could trigger sub-event so we leave InnerEvent to **Ignore**
- We are not catching the KeyDown event so we are not enven allowed to set data for the CharPressed /Modifier fields.

We now have our completet rigger of the validation system and only need to add the condition to the configuration.

NB: FOR MORE ON HOW TRIGGERS WORK PLEASE THE "UNDERSTANDING B1 VALIDATION TRIGGERS" GUIDE



In this sample the condition was the if the customer had a previous sales order with the same customer refrence number we would not allow it.

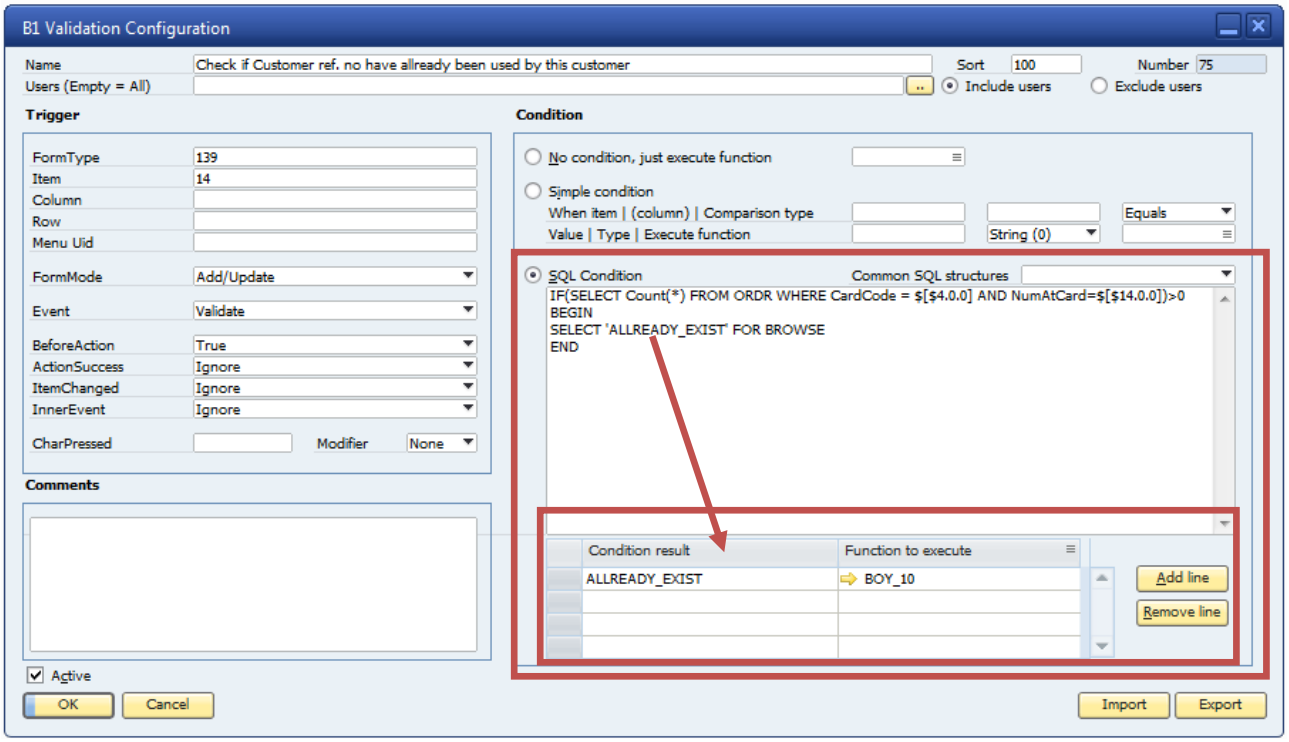
In order for use to do such a check we could need the entered value and some SQL to check the existing sales order records in the database. We therefor choose an SQL Condition.

The SQL we would need will be like this.

```
IF(SELECT Count(*) FROM ORDR WHERE CardCode = $[$4.0.0] AND NumAtCard=$[$14.0.0])>0
BEGIN
SELECT 'ALLREADY_EXIST' FOR BROWSE
END
```

This SQL will use the dynamic syntax do the SQL check in the database. If it find any previous sales order (ORDR) for this customer (CardCode) with the same Customer Ref No. (NumAtCard) it will return the string 'ALLREADY_EXIST'. Else it will return nothing.

NB: FOR MORE ON THE SYNTAX PLEASE SEE THE "UNDERSTANDING DYNAMIC SYNTAX" GUIDE



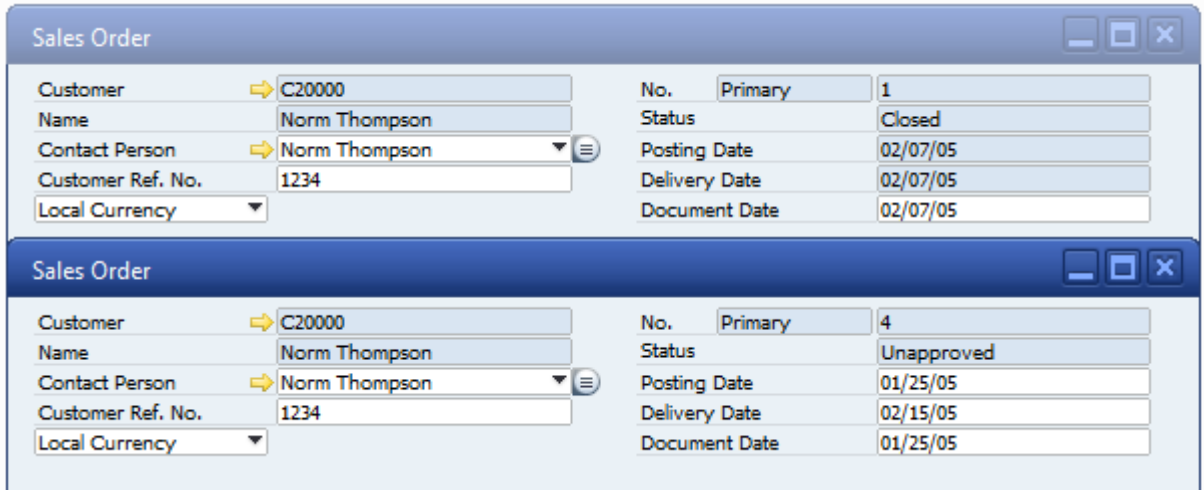
The final thing we need now is to tell the system that when we encounter a result back from the SQL that say 'ALLREADY_EXIST' we should show our message.

NB: FOR MORE ON THE B1 VALIDATION SYSTEM CONDITIONS PLEASE SEE THE "UNDERSTANDING B1 VALIDATION CONDITONS" GUIDE

We are finally done with configuration so we add it.

Use of functionality

We can now try our new functionality.



We have two previous sales orders for customer with code 020010 so we would try to test our functionality by creating a 3rd sales order and try to use the same customer ref. no 1234 again (by our rules this should not be allowed).

We create the sales order and move to the customer ref. no field.

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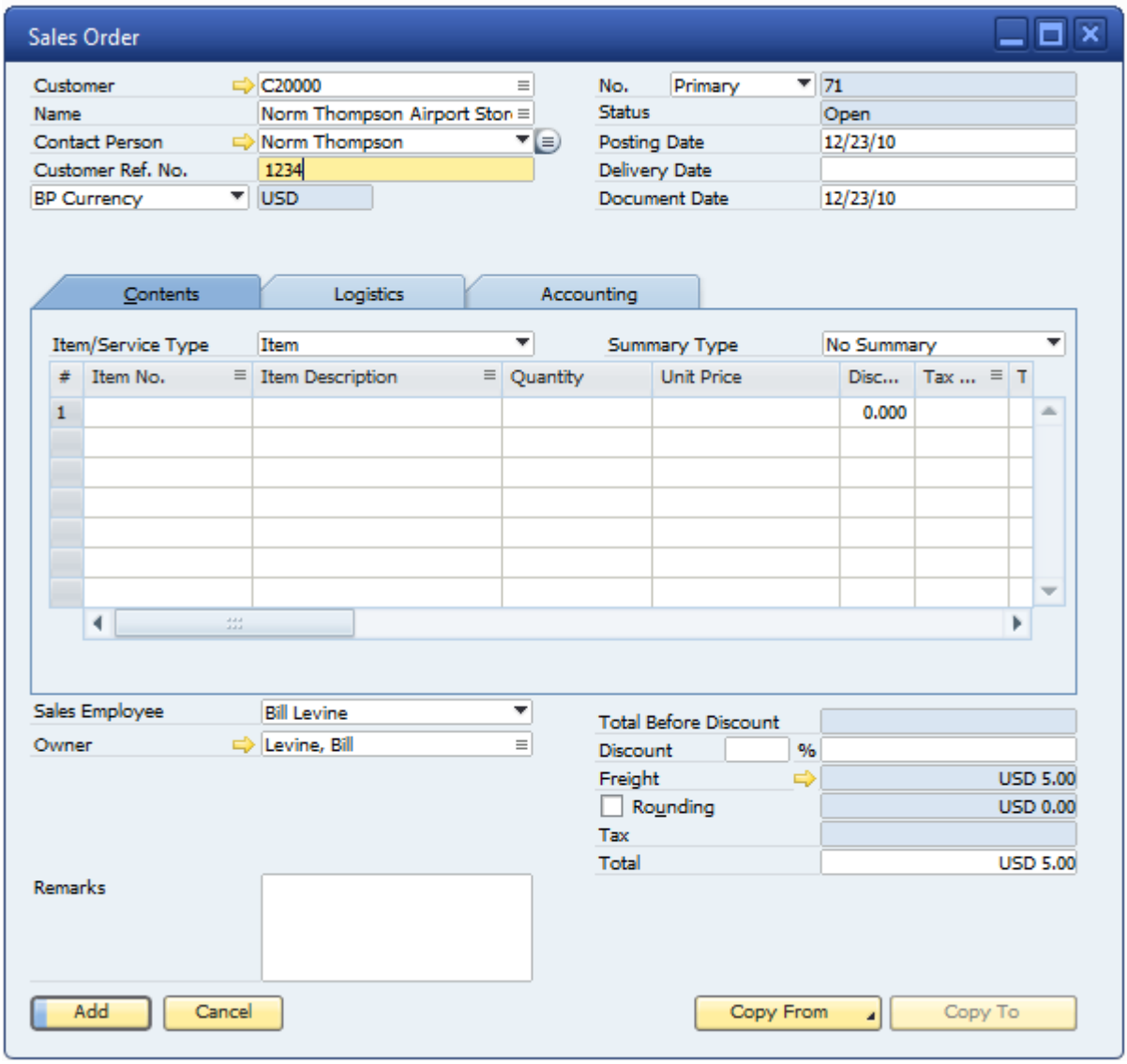
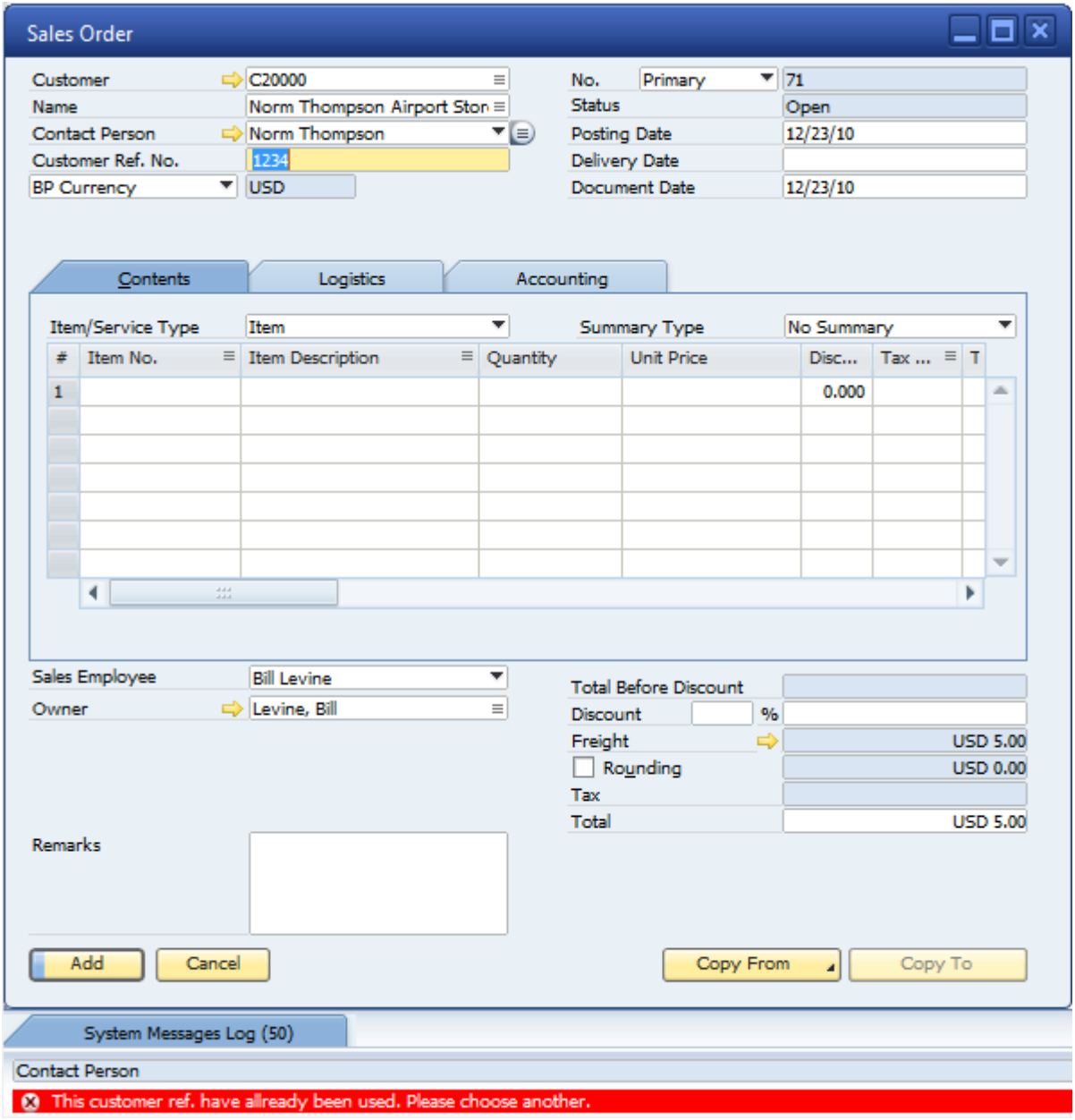
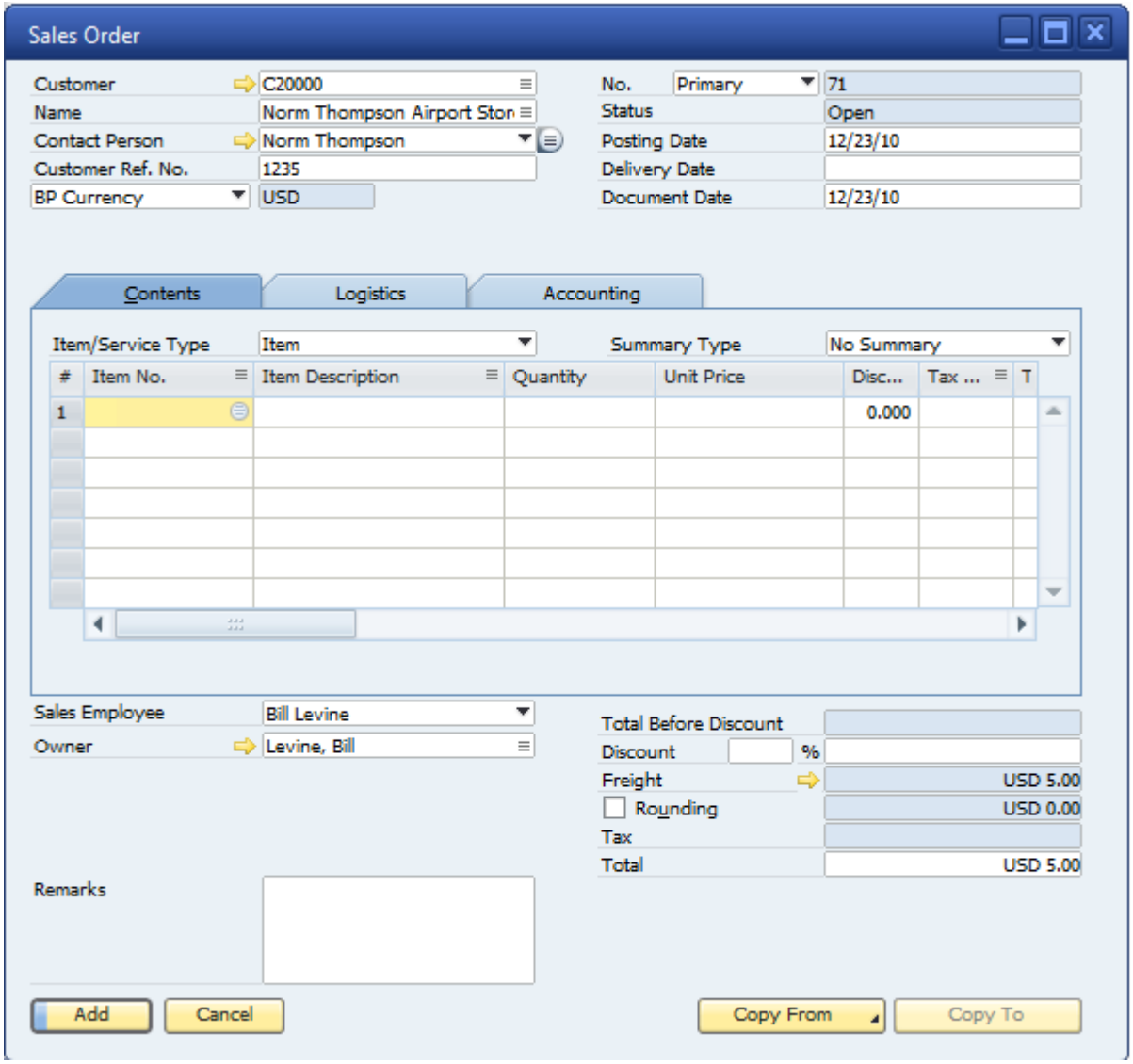


We type in 1234 which we of cause are allowed to do, but look what happens when we try to exit the field (using the mouse or the TAB key)



We get our error message and remains in the field because we need to enter something that is valid before we can continue.

We change the customer ref. no to 1235



And are allowed to leave the field.